



Dart Aerospace Ltd.  
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**RBW109-3101-58-1-5**  
**Job Sheet 178712**



*2-5*  
*7-26*

**Part No:** RBW109-3101-58-1-5

**Job Qty:** 24 ea

**Part Name:** Shaft



**Part Weight:** 0 lbs

**Status:** Scheduled

**Priority:** High

**Job Created:** 6/6/18

**Job Tracking No:**

**Due Date:** 7/23/18

**Created By:** Logan David

**Type:** SOLD

**Description:**

**Note:** DWG RBW109-3101-58-1 Rev 3 IPP Rev A 17.11.28 New issue DP Verify DD

**Ship Via:**

### Bill of Materials

### Job Routing

| Op No | Operation          | Qty    | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off |
|-------|--------------------|--------|------------|----------|-----------|---------|-----------------------|-----------|----------|
|       |                    |        |            |          | Setup hrs | Run Hrs | Workcenter / Supplier | Lead Time |          |
| 90    | Start up Operation | 24 Ea  | 7/23/18    | 7/23/18  | 0.00      | 0.00    | Start Up Machining-4  |           |          |
| 100   | Lathe Conv         | 24 pcs | 7/23/18    | 7/23/18  | 0.00      | 2.40    | Lathe Conv-1          |           |          |
| 110   | QC                 | 24 pcs | 7/23/18    | 7/23/18  | 0.00      | 0.00    | QC2 Machining-5       |           |          |
| 120   | QC                 | 24 pcs | 7/23/18    | 7/23/18  | 0.00      | 0.00    | QC8 Machining-5       |           |          |
| 130   | Packaging          | 24 pcs | 7/23/18    | 7/23/18  | 0.00      | 0.00    | Packaging3-2          |           |          |
| 140   | QC21-SA            | 24 Ea  | 7/23/18    | 7/23/18  | 0.00      | 0.00    | QC21                  |           |          |

Part Op  
Descriptions: **100** - -Cut to length as per DWG.

*18/8/16*  
*18/08/25*  
*MLC*  
**AUG 27 2018**  
**9-89**

### Job BOM

| Part / Item | Component Name | Quantity      | Operation             | Container                       |
|-------------|----------------|---------------|-----------------------|---------------------------------|
| 8908K62     | Shaft          | 12 ft (.5 ea) | 90-Start up Operation | <i>5016487</i><br><i>GA 046</i> |

### Job Allocations

| Operation             | Component Part | Required | Inventory | Allocated |
|-----------------------|----------------|----------|-----------|-----------|
| 90-Start up Operation | 8908K62        | 12       | 72        | 0         |

### Part Specifications

Specifications could not be found.



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**Container No: S103037**



**Part: RBW109-3101-58-1-5**

**Job No: 178712**

**Serial No/Batch: S103037**

**Revision: 3**

**Inspector:**

**Exp Date:**

**Instructions:**

**Date: 08/16/18**

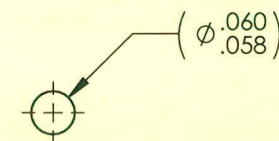
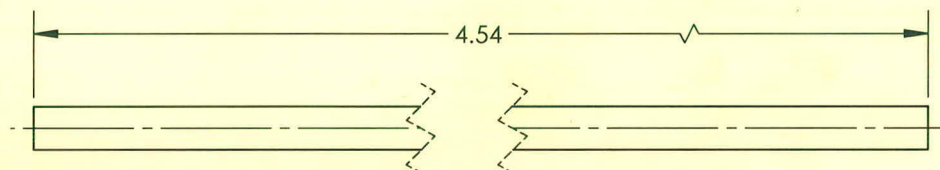
(S) (M) (D)

1-2-2  
1-2-2

178712

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| REVISIONS |         |                                          |           |         |          |
|-----------|---------|------------------------------------------|-----------|---------|----------|
| REV       | ECR     | DESCRIPTION                              | DATE      | INITIAL | APPROVED |
| 2         | 16-0212 | -5 CH'D DIM WA S(Ø.059) IS (Ø.060/.058). | 11/4/2016 | RJC     | JAG      |



(-5)

SHAFT

|                                                          |                                                        |
|----------------------------------------------------------|--------------------------------------------------------|
| <b>DART<br/>AEROSPACE</b>                                |                                                        |
| TITLE HAMMER, STEEL, BLADE CORROSION AND VOIDS DETECTION |                                                        |
| DWG NO. RBW109-3101-58-1-5                               | REV 3                                                  |
| MAT'L S.S.                                               | UNLESS OTHERWISE SPECIFIED<br>DIMENSIONS ARE IN INCHES |
| HEAT TREAT                                               | .XXX ± .005 FRACTIONS ± 1/8                            |
| FINISH                                                   | .XX ± .01 ANGLES ± 5°                                  |
| SPEC                                                     | .X ± .1 SURFACES = 125✓                                |
| DRAWN BY: DUERFELDT                                      | 1. BREAK ALL SHARP EDGES<br>.015 x 45° OR .015R        |
| CHECKED: DUERFELDT                                       | 2. DIMENSIONAL LIMITS APPLY<br>AFTER PLATING           |
| OPPS APPR: ANDERSON                                      | 3. INTERPRET DIM AND TOL PER<br>ASME Y14.5M-2009       |
| QA APPR: LINDSAY                                         | USED ON MODEL                                          |
| APPROVED: GILBERT                                        | AW109/AW119                                            |
| SCALE 4:1                                                | DATE 3/12/2015 SHEET 4 OF 5                            |

178712









DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |                                                |                                                                                                                                                                                    |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  |                       |                                                 |  |
|--------------------------------------------------------------|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--|-----------------------|-------------------------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ |                                                | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> |                                                            | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |                                               |  |                       |                                                 |  |
| Date :                                                       |                                                | Step #:                                                                                                                                                                            |                                                            | QTY Effective :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  | MRB (QSI042) Approval |                                                 |  |
| Description Work Order Deviation                             |                                                |                                                                                                                                                                                    |                                                            | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                               |  |                       | Completed By                                    |  |
|                                                              |                                                |                                                                                                                                                                                    |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  |                       | Lead hand / Supervisor<br>Approval Verification |  |
|                                                              |                                                |                                                                                                                                                                                    |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  |                       |                                                 |  |
|                                                              |                                                |                                                                                                                                                                                    |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  |                       | QC / QA Coordinator<br>Approval                 |  |
| <b>Root Cause</b>                                            |                                                | <b>FAULT CATEGORY</b>                                                                                                                                                              |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  |                       |                                                 |  |
| Environment <input type="checkbox"/>                         | No Re-verification <input type="checkbox"/>    | Pressure/Forced <input type="checkbox"/>                                                                                                                                           | Temperature/Cure <input type="checkbox"/>                  | Power Loss/Surge <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Positioned Wrong <input type="checkbox"/>     |  |                       |                                                 |  |
| Design <input type="checkbox"/>                              | Operator <input type="checkbox"/>              | Bending <input type="checkbox"/>                                                                                                                                                   | Set-up <input type="checkbox"/>                            | Folio/Program <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Outside Dimensions <input type="checkbox"/>   |  |                       |                                                 |  |
| Doc/Data <input type="checkbox"/>                            | Offset/Setup <input type="checkbox"/>          | Centre Not Concentric <input type="checkbox"/>                                                                                                                                     | BOM/Route <input type="checkbox"/>                         | Grain <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Over/Under tolerance <input type="checkbox"/> |  |                       |                                                 |  |
| Equip/Tooling <input type="checkbox"/>                       | Supplier <input type="checkbox"/>              | Cracks <input type="checkbox"/>                                                                                                                                                    | Broken/Damage/Defect <input type="checkbox"/>              | Weld <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Part Incorrect <input type="checkbox"/>       |  |                       |                                                 |  |
| Handling/Pre <input type="checkbox"/>                        | Training <input type="checkbox"/>              | Crimp/Kink/Ripple/Wave <input type="checkbox"/>                                                                                                                                    | Inspection Incomplete/Unqualified <input type="checkbox"/> | Wrong Stock Pulled <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Part Lost/Missing <input type="checkbox"/>    |  |                       |                                                 |  |
| Material <input type="checkbox"/>                            | Use for Testing <input type="checkbox"/>       | Cuffs <input type="checkbox"/>                                                                                                                                                     | Contamination <input type="checkbox"/>                     | Out of Sequence <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Part Moved <input type="checkbox"/>           |  |                       |                                                 |  |
| Internal Transport <input type="checkbox"/>                  | Poor Information <input type="checkbox"/>      | Crushing <input type="checkbox"/>                                                                                                                                                  | Countersink <input type="checkbox"/>                       | Off-set <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Drawing <input type="checkbox"/>              |  |                       |                                                 |  |
| Tribal Knowledge <input type="checkbox"/>                    | Rushing <input type="checkbox"/>               | Heat Treat <input type="checkbox"/>                                                                                                                                                | Cut Too Short <input type="checkbox"/>                     | Mislabeled <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Finish <input type="checkbox"/>               |  |                       |                                                 |  |
| LOA <input type="checkbox"/>                                 | Product Improvement <input type="checkbox"/>   | Wave/Twist in Tube <input type="checkbox"/>                                                                                                                                        | Instructions Incomplete/Unclear <input type="checkbox"/>   | Fit/Function <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Misread <input type="checkbox"/>              |  |                       |                                                 |  |
| Substation <input type="checkbox"/>                          | Process Improvement <input type="checkbox"/>   | Marks/Chatter <input type="checkbox"/>                                                                                                                                             | Drill Holes <input type="checkbox"/>                       | Misaligned/off center <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Turning Sequence <input type="checkbox"/>     |  |                       |                                                 |  |
| Past Expiry Date <input type="checkbox"/>                    | Manufacturing Process <input type="checkbox"/> | OTHER : <input type="checkbox"/>                                                                                                                                                   |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  |                       |                                                 |  |
| Misidentified <input type="checkbox"/>                       | Past Due <input type="checkbox"/>              |                                                                                                                                                                                    |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |  |                       |                                                 |  |